

REMARKS

Reconsideration of the subject application, pursuant to and consistent with 37 C.F.R. § 1.104, and in light of the following remarks, are respectfully requested.

Rejections under 35 USC 103*Hartman reference*

The rejections of the claims as anticipated by or obvious over this single reference are respectfully traversed.

This reference has been discussed in detail as having ferromagnetic particles each surrounded with a surface composition that is electrically insulating or electrically conductive.

The Final Office Action (paper no. 43, mailed 3/11/2003) states that "[i]t is the examiners [*sic*] opinion that electromagnetic interference suppression would be inherent in the system of Hartman." (Page 3 thereof.) The examiner is requested to provide support for such an opinion via declaration or otherwise, as required by 37 CFR § 1.104(d)(2).

The assumed inherence also fails to account for the selection within the teaching of Hartman to choose an electrically insulative coating. There is no basis alleged for why the selection was made to be the same as that claimed, other than hindsight reconstruction, and 'obvious to try' is not a valid basis for selection.

And there is no disclosure of the word "soft" or "soft magnetic" in the Hartman disclosure, so the claimed invention is not anticipated.

The citation to *In re Best* is inapposite because in that case a property of an existing composition was at issue whereas here it is a different material. Presently, applicants have reiterated that the Hartman composition uses a hard magnetic material made of iron or nickel so that the particles can be drawn into a bridge. The examiner does not explain why elimination of this property, which is critical for cited art to make the disclosed bridges, would have been obvious. See

also the submitted declaration of Dr. Yoshida (at ¶ 9), submitted under 37 C.F.R. § 1.132, explaining why such a property is detrimental to an EMI suppressor. Whether the *Best* rejection is under Sec. 102 or Sec. 103, for the present rejection under Sec. 103, the examiner has not explained the obviousness of changing so many variables in the Hartman reference to achieve the claimed invention, nor where Hartman contains any disclosure of a soft magnetic material.

That Hartman provides a dispersion and then changes the dispersion is clearly not anticipatory and is evidence leading away from the present invention, for the examiner has failed to explain why elimination of this critical prior art step would have been obvious. As a product or temporary condition of a material is not anticipatory, *Instant Milk Co. v. Watson, Comr. Pats.*, 118 USPQ 50 (D.C.D.C. 1957); *In re LeGrice*, 133 USPQ 365 (C.C.P.A. 1962), the examiner must provide a reason for departing from the prior art teaching to avoid modifying that temporary condition shown in the prior art, because to avoid such modification will defeat the purpose of that prior art, *Ex parte Rosenfeld*, 130 USPQ 113 (P.O.B.A. 1961), thereby leading away from the present invention.

That the intermediate dispersion of Hartman, even assuming the proper particles were disclosed, could be used to make applicants' invention is not a type of property on which obviousness can be based. *In re Gyurik*, 201 USPQ 552, 557-8 (C.C.P.A. 1979) (and footnote 14).

Regardless of how well-dispersed applicants' particles are, and those of Hartman's intermediate, the particles are dispersed. Yet Hartman clearly then arranges the particles into bridges (agglomerates spanning the material thickness), and those ordered structures are clearly not a dispersion of the particles throughout the material. Thus, there are clear structural differences cited in the rejected claims distinguishing the Hartman structure; leaving the Hartman particles dispersed clearly defeats Hartman's purpose of providing electrically conductive bridges across the thickness of his device.

Goto et al. Reference

The rejections over this reference are respectfully traversed. The examiner is referred to the aforementioned Yoshida declaration submitted herewith.

Dr. Yoshida explains in ¶ 4 and ¶ 10 that a recording medium always includes a hard magnetic material. However, even if one of the layers of the Goto device included both a soft magnetic material and a non-conducting material, such a device necessarily has a hard magnetic material (¶ 4) and includes an electrically conductive material (¶ 10). The presence of the electrically conductive material prevents absorption of the EMI, thus not suppressing it, and it can reflect the EMI and cause interference with nearby circuits (see also ¶ 5 of the Yoshida declaration); both of these physical properties teach away from suppressing EMI.

The Goto device does not "suppress[]" EMI, but merely reflects or diverts it. As described in this application (page one, third paragraph), reflected radiant waves "adversely affect other components in the same electronic device as secondary noise." Because the whole point of the present invention is the suppression of EMI using a device having improved thermal characteristics, the "interference suppressing" portion of the claim must be considered when determining the scope of what is being claimed. *Jansen v. Rexall Sundown Inc.*, 68 USPQ2d 1154, 1158 (Fed. Cir. 2003). The examiner cannot ignore the physical properties of the material necessary for the Goto *et al.* reference to function as a recording medium, nor those of the soft magnetic material necessary for the claimed invention to function as an EMI suppressor.

Horie et al. Reference

The rejections over this reference are respectfully traversed. The examiner's statement that the mere presence of soft magnetic material/particles in the Horie reference means that the Horie device must also act as an EMI suppressor are unsupported by any teaching from the reference, reasoning based on such a teaching, or affidavit, as required by § 1.104(d). If the allegation is inherency, Dr. Yoshida's declaration places the burden on the examiner to explain the inherency. Dr. Yoshida attests (declaration at ¶¶ 6-7) that the soft magnetic material used for transformers by necessity has properties different and

opposite from the properties of a soft magnetic material used for suppressing EMI: namely, that magnetic losses are kept low in a transformer to allow energy to be transformed (the whole point of a transformer), whereas the losses for the instant EMI suppressor are high so as to effect suppression.

Because the properties inherent in a transformer (loss loss transfer of energy) and those in a suppressor (high loss to suppress energy transfer), the use of this reference cannot stand as a basis for anticipation or obviousness. As argued above in respect of *Jansen*, the use of "suppression" in the claims cannot be ignored just because a similar material ("soft magnetic") material is used because that "soft magnetic" material has other properties which are critical to its use in different environments (energy transformation versus energy suppression).

Ogawa et al. and Takahashi et al. References.

As explained above regarding Hartman, the presence of iron (a hard magnetic material) is contrary to the properties necessary for an EMI suppressor. The cited *In re Keller* case is not relevant to this rejection because the rejection fails to consider the properties of the material used in the references (soft versus hard, and the losses imposed by the soft material). It has been explained why the materials of the references cannot be used in the present device, and to the extent that a soft magnetic material is present, it is accompanied by a hard magnetic material and/or is a low loss soft magnetic material. This is not an issue of whether the material can be "bodily incorporated" into the claimed device, because clearly particles of any of these materials can be physically mixed with a matrix material.

Applicants have explained the structural differences between the claimed device and those of the cited art. Contrary to the citations to *Casey* and *Otto*, the issue here is not the process of making, but the process of using, and hence it is the patentability of the material, not its method of manufacture, on which patentability is determined. *Ex parte Ochiai*, 24 USPQ2d 1265 (B.P.A.I., 1992). It

is the presence of a soft magnetic material having high losses that allows the claimed device to operate as an EMI suppressor.

These references are both directed to magnetic recording media, and Dr. Yoshida has explained why such materials are contrary to use in the claimed invention (§§ 3-5). To the extent that a magnetic recording medium includes a layer having soft magnetic and electrically insulative particles, it is impermissible to choose only that disclosure, *In re Wesslau*, 147 USPQ 391 (C.C.P.A. 1965), without some teaching or motivation for using only that portion of the reference structure in a device (as claimed) that necessarily has, and requires, very different properties.

Obviousness Rejections

The rejections of claims 12, 13, and 14 relating to the resin and the geometry fails to overcome the limitations described above. Claim 1, from which these claims all depend, requires a soft magnetic material for an EMI suppressing device. Hartman discloses no soft magnetic materials, Horie *et al.* does not disclose a soft magnetic material having high losses, and Goto *et al.* and Takahashi *et al.* both relate to recording media and so have electrically conductive materials, and so act as hard magnetic materials in reflecting EMI waves. Further, none of these references is concerned with the problem of suppressing EMI radiation, and one would have to eliminate the hard magnetic and electrically conductive particles, and use a different type of soft magnetic material, so arrive at applicants' invention.

The rejection of claim 16 as obvious over Ogawa *et al.* or Takahashi *et al.*, both of which are directed to magnetic recording media, and since claim 1 still requires an EMI suppressing device, neither of these references has any suggestion of suppressing EMI from interfering with an electronic component.

Conclusion

As none of the cited references teaches the use of an EMI suppressor having a soft magnetic material (which material necessarily must have high losses, else nothing is suppressed), all of the rejections should be withdrawn. The present claims cannot properly be read on only a portion of a reference device (e.g., only a layer having some soft magnetic particle undefined as to losses, and optionally in combination with an electrically insulating material), and do to so must ignore the prior art "as a whole" (*Graham*) and give no weight to specific claim language that defines the claimed invention as an EMI suppressor.

Should any of these rejections be maintained, as pertinent, the examiner is requested to explain the motivation for eliminating the hard magnetic material of Hartman, the electrically conductive (and thus EMI reflective) material of Goto, Ogawa, and Takahashi, or changing the low loss soft magnetic material of Horie into a high loss material, including in light of the lack of disclosure in all of these references of an intent to suppress EMI waves.

Respectfully submitted,

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TRANSMISSION – 37 CFR 1.8**

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